

64,600-076
890108

Abstract of the Disclosure

0053 A field emission display panel device that incorporates carbon nanotube emitter layers for emitting electrons wherein the carbon nanotube layers has a smaller width than the conductive paste layers it is deposited on is disclosed. The width of the carbon nanotube layer should be less than $3/4$ of the width of the conductive paste layer, or in a range between about $1/4$ and $3/4$ of the width of the conductive paste layer, i.e. such as a silver paste layer. The present invention novel structure prevents the overflow of the carbon nanotubes, after a curing process for the nanotubes is conducted, onto the sidewall of the conductive paste layer, and thus significantly improves the electron density projected toward the fluorescent powder coating layer to produce an image with reduced electron scattering. As a result, image clarity, definition and contrast can be improved in the FED device.